

## GUNUNGIA (LEPIDOPTERA, PYRALIDAE, PHYCITINAE) NEW TO CHINA, WITH DESCRIPTION OF A NEW SPECIES

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**Abstract** The genus *Gunungia* Roesler & Küppers is newly reported from China. The female of the genus is described for the first time and the generic characters are emended accordingly. *Gunungia capitirecava* sp. nov. is described, with adult and genital structures illustrated. A key to the described species is given.

**Key words** Lepidoptera, Pyralidae, Phycitinae, *Gunungia*, new species, China.

The monotypic genus *Gunungia* was established by Roesler & Küppers, 1979, with *G. rimba* Roesler & Küppers, 1979 as the type species. However, the female of the genus is unknown previously.

In the present paper, *Gunungia* Roesler & Küppers is reported for the first time from China, with female described as new to science. One new species, *Gunungia capitirecava* sp. nov., is described based on the specimens collected from Guangxi, Guizhou and Yunnan, China. The type specimens are deposited in the Insect Collection, College of Life Sciences, Nankai University, Tianjin, China.

### *Gunungia* Roesler & Küppers, 1979

*Gunungia* Roesler & Küppers, 1979. *Beitr. Naturk. Forsch. Südost. Asien*, 3: 162; Roesler, 1983, in Diel, *Heterocera Sumatrana*, 3: 68.

Type species: *Gunungia rimba* Roesler & Küppers, 1979

Generic characters. Antennae with shallow sinus at base of shaft in male, filiform in female. Labial palpi upturned, terminal segment more or less swollen. Forewing with  $R_3$  and  $R_4$  basally stalked for about  $3/5$  length of  $R_4$ ,  $M_2$  and  $M_3$  basally approximate to each other for at most  $1/3$  of their length,  $Cu_1$  and  $Cu_2$  free; cell about  $2/3$  length of forewing. Hindwing with  $M_2$  and  $M_3$  stalked for at most  $1/2$  of their length,  $Cu_1$  and  $Cu_2$  free; cell short, less than  $1/3$  length of the wing.

Male genitalia. Uncus subtriangular or triangular. Gnathos slender, its apical process at least as long as uncus. Transtilla sclerotized, fused medially. Valva with costa not reaching terminal of valva; clasper absent. Juxta U-shaped, with pair of well developed lateral lobes. Vinculum U-shaped. Aedeagus cylindrical, with many thorn-like cornuti. Culcita present.

Female genitalia. Papillae analis triangular. Antrum developed. Ductus bursae longer than corpus bursae; ductus seminalis arising from corpus bursae. Corpus

bursae membranous; signum present.

Distribution. China (Guangxi, Guizhou, Yunnan), Indonesia (Sumatra).

Remarks. In Roesler's description (1983), the cornutus in aedeagus is absent. However, we consider the thorns as cornuti in the present description.

### Key to species of *Gunungia* based on male genitalia

- Costa with a tooth like process at distal  $1/6$ ; juxta with stout lateral lobes rounded at terminal ..... *G. capitirecava* sp. nov.  
Costa without tooth like process at distal  $1/6$ ; juxta with slenderer lateral lobes bifid at terminal ..... *G. rimba* Roesler & Küppers

### *Gunungia capitirecava* sp. nov. (Figs. 1-7)

Description Head (Fig. 2). In male, vertex with whitish scaled ridge, concave in V shape; antennae with scape blackish brown except whitish anteriorly, flagellae brown, with a flat sinus and dark brown tufts at base of shaft; labial palpi upturned, flatly widened, obviously reaching over vertex, first segment grayish, second and third segments brown, third segment  $2/3$  length of second; maxillary palpi small,  $1/3$  length of second segment of labial palpi, with diffused brownish scales. In female, vertex with brownish scales; antennae thin, dark brown; labial palpi with first segment grayish, second and third segments yellowish brown and about same length.

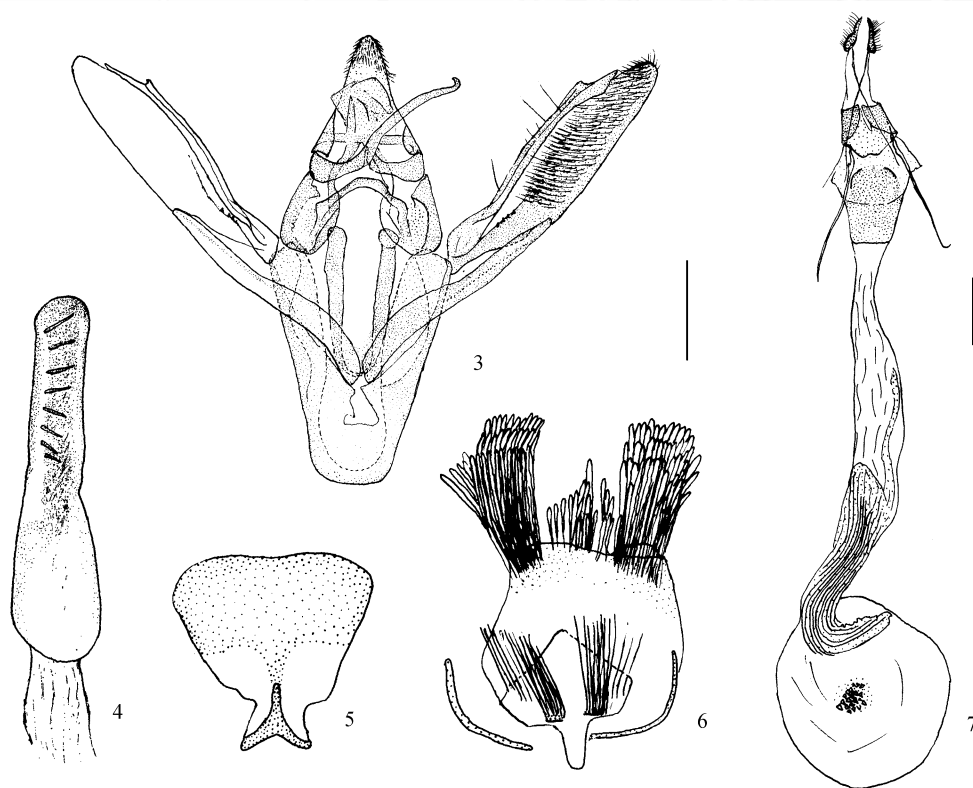
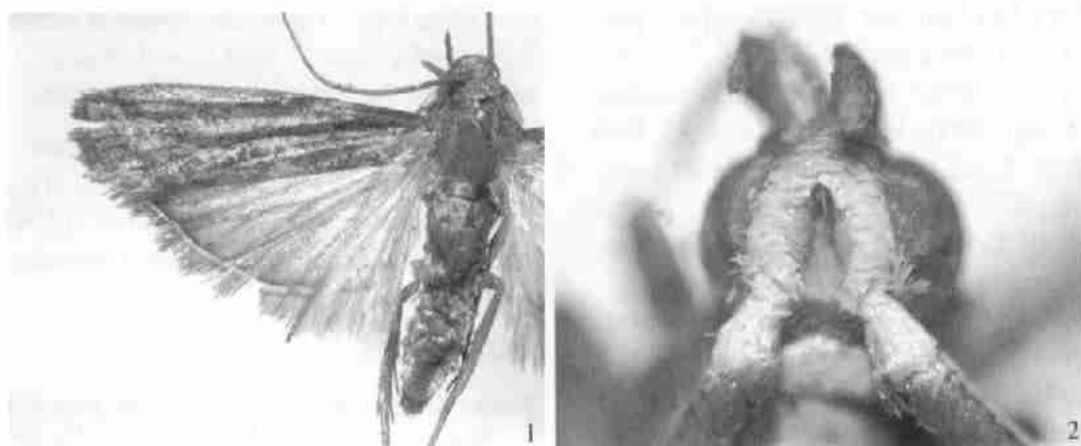
Thorax. Thorax, patagia, tegulae yellowish brown. Legs dark brown or yellowish brown; tarsi fuscous, annulated with ochreous-whitish scales; hindlegs with mid inner spurs 2.2 times length of mid outer ones, other inner spurs twice length of outer ones.

Wings (Fig. 1). Wingspan 16.0–24.5 mm. Forewings uniformly grayish brown tinted with reddish brown, having a whitish ridge of raised scales at cell; antemedial line and discal spots faded; postmedial line obscure, dark grayish, sinuate; terminal line dark grayish; terminal dots dark brown; cilia reddish or

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Figs 1-7. *Ganungia capitireawa* sp. nov. 1. Adult. 2. Vertex. 3-6. Male genitalia. 3. Genitalia without aedeagus. 4. Aedeagus. 5. 8th tergite. 6. 8th sternite and culcita. 7. Female genitalia. Scale bars = 0.5 mm.

grayish brown. Hindwings semitransparent, grayish brown, darker along margins and veins; cilia grayish white.

Male genitalia (Figs. 3-4). Uncus triangular, pointed at apex, setose on terminal 1/3 dorsally. Apical process of gnathos long, hook like, about 1.3 times as long as uncus. Transtilla medially fused, arched in shape. Valva elongately narrow, cucullus and ventral half densely setose; costa heavily sclerotized, spine-like at tip, with a tooth-like process at distal 1/6. Saccus narrowly clavate, about same length as costa. Juxta with lateral lobes stout, rounded terminally. Vinculum with length slightly longer than greatest width. Aedeagus as long as valva, basal half thicker than terminal half,

scattered with a row of spine-shaped cornuti in distal half. Eighth tergite and sternite, as well as culcita shown in Figs. 5 and 6.

Female genitalia (Fig. 7). Papillae anales small, with sparse hairs. Apophyses anteriores basally inflated, same length as posterior ones. Ostium bursae simple. Antrum nearly rectangular. Ductus bursae about 3.5 times as long as apophyses anteriores; anterior 2/5 well sclerotized, posterior 3/5 membranous. Corpus bursae rounded, about half length of ductus bursae; signum irregular in shape, composed of numerous blunt spines. Ductus seminalis from middle of corpus bursae near signum.

Holotype ♂, China, Fangcheng gang (21° 35' N,

108° 22' E; alt. 640 m), Guangxi Province, 8 Apr. 2002, leg. HAO Shu-Lian and XUE Hui-Jun, gen. slide No. RYD04343. Paratypes: China, 7 ♂ 1 ♀, Chishui (28° 34' N, 105° 42' E; alt. 240 m), Guizhou Province, 21-23 Sep. 2000, leg. YU Hai-Li; 1 ♀, Ruili (24° 00' N, 97° 50' E, alt. 1 000 m), Yunnan Province, 5 Aug. 2005, leg. REN Ying-Dang; 1 ♂ 1 ♀, Mengla (21° 29' N, 101° 33' E, alt. 650 m), Yunnan Province, 25 Aug. 2005, leg. REN Ying-Dang.

Distribution. China (Guangxi, Guizhou, Yunnan).

Remarks. The new species is similar to *G. rimba* Roesler & Kùppers, but can be separated from it by the vertex in male with whitish V-shaped ridge; the costa in male having a tooth-like process at distal 1/6, and the lateral lobes of juxta stout and rounded at terminal. In *G. rimba*, the head is blackish in male; the costa lacks the tooth-like process, and the lateral lobes of juxta are

slenderer and bifid at apex.

Etymology. The specific epithet is derived from the Latin prefix *apit-* (head) and *reavus* (sunken), referring to the sunken vertex of the species.

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## 中国螟蛾科一新纪录属及一新种记述 (鳞翅目, 螟蛾科, 斑螟亚科)\*

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**摘要** 首次报道桂斑螟属 *Gunungia* 在中国的分布, 首次报道该属的雌性个体, 并据此对属征进行了补充描述。桂斑螟属目前只包括模式种 *Gunungia rimba* Roesler & Kùppers, 分布于印度尼西亚苏门答腊岛。本文记述了采自我国广西、贵州和云南的 1 新种——凹头桂斑螟 *Gunungia capitirecava* sp. nov., 编制了已知种的检索表, 提供了新种的特征图。模式标本均保存在南开大学生命科学学院昆虫标本室。

凹头桂斑螟, 新种 *Gunungia capitirecava* sp. nov. (图 1~7)

翅展 16.0~24.5 mm。新种与 *G. rimba* Roesler & Kùppers

**关键词** 鳞翅目, 螟蛾科, 斑螟亚科, 桂斑螟属, 新种, 中国。

中图分类号 Q969.432.8

近似, 但新种雄性头顶被白色 V 型鳞毛簇; 抱器背在端部 1/6 处具一齿状突起, 阳茎基环两侧臂粗壮, 末端圆钝。

正模 ♂, 广西防城港峒中林场, 640 m, 2002-04-08, 郝淑莲、薛怀军采 (玻片号 RYD04343)。副模: 7 ♂ 1 ♀, 贵州赤水桫欏, 240 m, 2000-09-21~23, 于海丽; 1 ♀, 云南瑞丽珍稀植物园, 1 000 m, 2005-08-05, 任应党采; 1 ♂, 1 ♀, 云南西双版纳自然保护区补蚌管理站, 650 m, 2005-08-25, 任应党采。

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